

**ANACONDA**  
from mine to consumer

REG. U.S. PAT. OFF.

# Handbook

## OF ELECTRICAL WIRE AND CABLE

● All materials and recommendations in this handbook conform to the National Electrical Code. Where local regulations are in excess of the National Electrical Code, consult local inspection authorities.

**ANACONDA WIRE & CABLE COMPANY**

GENERAL SALES DEPARTMENT • 25 BROADWAY, NEW YORK • • • CHICAGO • 20 NORTH WACKER DRIVE

## ANACONDA WIRING MATERIALS

### Recommended for Service Conditions

The following tables present a means of selecting the proper wire or cable for service conditions encountered in all types of buildings. All recommendations are based upon requirements

of the National Electrical Code. Where code requirements are a minimum, a choice of more desirable materials is also given. Local authorities should be consulted in all cases.

CONDITION	KIND OF JOB	ANACONDA PRODUCT	CONDITION	KIND OF JOB	ANACONDA PRODUCT
<b>1. SERVICE ENTRANCE</b> Overhead	Best	Service Entrance Cable; Types SC, SCF, SC-100, SCF-100 (without conduit; may be run through to range.)	<b>5. CONDUIT WORK AND ELECTRICAL METALLIC TUBING WORK</b>  (Conductors larger than No. 0 shall not be used in electrical metallic tubing work)	Dry Locations	Rubber-insulated Braid-covered Wire; Type R single conductors, or Type RD duplex conductors.
	Desirable	Service Drop Cable; Types C, CF, (with conduit protection down wall of house to meter.)		Wet or Damp Locations	Rubber-insulated Braid-covered Wire; Type R conductors may be used only if conduit system is water-tight; otherwise, Lead-sheathed Wire and Cable; Type RL.
	Inexpensive	Weatherproof Wire; Type URC.		Corrosive Locations	Rubber-insulated Braid-covered Wire; Type R conductors may be used, but conduit should be corrosion-resisting, and system vapor-tight.
Underground	Commercial, Industrial	Lead-sheathed Cable; Types RL or VC, in conduit or duct.		Hazardous Locations	Rubber-insulated Braid-covered Wire; Type R conductors may be used, but conduit system must be installed with suitable protective equipment.
	Residences, other small buildings	Duraseal Cable; Type T if buried entire length; Type D if extended up to overhead lines.		Hot, Dry Locations Conduit work in boiler rooms, bakeries, steel mills, steam tunnels, etc.	Rubber-insulated Braid-covered Wire; Type R (special rubber compound) Asbestos-covered Wire and Cable; Type AVC.
<b>2. RUNS TO OUTBL'D'GS, GARAGES, GROUNDS</b> Overhead	Desirable	Service Drop Cable; Types C, CF, (with conduit protection down wall of building to meter.)	<b>6. SURFACE METAL RACEWAY SYSTEMS</b>	Dry Locations	Rubber-insulated Braid-covered Wire; Type R conductors, not larger than No. 8 AWG.
	Inexpensive	Weatherproof Wire; Type URC.		Exposed or concealed; buried in plaster	Armored Cable; Type AC (May be fished.)
Underground	Residences, other small buildings	Duraseal Cable; Type T if buried entire length; Type D if extended up to overhead lines.	<b>7. ARMORED CABLE WORK</b> Dry Locations	Wet Locations	Underground runs, imbedded in masonry, concrete or fill in buildings under construction or exposed to moisture or destructive vapors
<b>3. OPEN WIRING</b> Industrial Installations, Residences, etc.	Dry Locations Normal conditions	Rubber-insulated Braid-covered Wire; Type R single conductors, solid or stranded. (Code, Intermediate, 30%, Duracode or Special Grades.)			Armored Leaded Cable; Type ACL.
	Dry Locations Liable to mechanical injury	Same; but protect by running in boards or in either Anaconda Flexible Steel Conduit or Duraduct Flexible Non-metallic Conduit.	Hot or corrosive locations		Armored Cable not Used.
	Damp or Wet Locations	Lead-sheathed or Rubber-jacketed Wire or Cable.			
	Corrosive Locations	Weatherproof or Rubber-jacketed Wire or Cable as directed by local authorities.	<b>8. UNDERFLOOR RACEWAYS</b>	Open-bottom Types	Rubber-insulated Braid-covered Wire; Type RD, or Type R, with double braid. If open-bottom pads are imperfect, Type AC Armored Cable or Durax Non-metallic Sheathed Cable must be used. Conductors shall be not larger than No. 8, AWG.
	Hazardous Locations	Open Wiring not Permitted.		Fully enclosed Types	Rubber-insulated Braid-covered Wire, Type R or Type RD.
	Hot Locations	Rubber-insulated Braid-covered Wire; Type R (spec. rubber compound) Asbestos Wire and Cable; Type AVC.		Wet Locations	Underfloor raceways should exclude moisture. If in doubt, Rubber-insulated Lead-covered Wire, Type RL, or Armored Leaded Cable, Type ACL, should be used.
<b>4. CONCEALED KNOB-AND-TUBE WORK</b>	Dry Locations Normal conditions	Rubber-insulated Braid-covered Wire; Type R single conductors, solid or stranded. (Code, Intermediate, 30%, Duracode or Special Grades.)	<b>9. NON-METALLIC SHEATHED CABLE SYSTEMS</b>	Dry Locations Exposed or concealed	Durax Non-metallic Sheathed Cable; (May be fished.)
	Dry Locations Liable to mechanical injury	Same; but protect by running in boards or in either Anaconda Flexible Steel Conduit or Duraduct Flexible Non-metallic Conduit.		Wet, hot hazardous or corrosive locations	Non-metallic Sheathed Cable Not Permitted
	Damp or Wet Locations	Rubber-jacketed Wire or Cable.			
	Corrosive Locations	Rubber-jacketed Wire or Cable.			
	Hazardous Locations	Open Wiring not Permitted.			
	Hot Locations	Rubber-insulated Braid-covered Wire; Type R (special rubber compound) Asbestos-covered Wire and Cable; Type AVC.			

Material originally prepared for and issued as Time Saver Standards



CONDITION	KIND OF JOB	ANACONDA PRODUCT	CONDITION	KIND OF JOB	ANACONDA PRODUCT
<b>10. CAST-IN-PLACE RACEWAY WORK</b>	Dry Locations	Rubber-insulated Braid-covered Wire; Type R or Type RD wires or cables.	<b>13. (Continued) FIXTURE APPLIANCE AND PORTABLE TOOL WIRING</b>  Hazardous Locations	Fixture Wiring in Class I, II, III Locations	Rubber-insulated Braid-covered Wire, Type R, with $\frac{3}{4}$ " insulation installed in conduit hangers.
	Wet Locations	Rubber-insulated Lead-covered Wire; Type RL, or Armored Lead Cable; Type ACL should be used.		Portable Lamps or Tools in Class I, II, III, IV Locations	DURACORD or All-Rubber Cord, Type S with extra ground conductor.
	Hot, Dry Locations	Rubber-insulated Braid-covered Wire; Type R, or Type RD (special rubber compound.)		Fixture Wiring in Class IV Locations	Rubber-insulated Braid-covered Wire, Type R, enclosed in conduit, size not less than No. 14, AWG.
<b>11. UNDER-PLASTER EXTENSIONS</b>	Conduit, Flexible Conduit, Armored Cable	If runs are in conduit, follow rules under section 5 for "conduit work". If flexible conduit is used, specify "Anaconda" Flexible Steel Conduit, and follow wire rules under "conduit work". If armored cable is used, follow rules under Section 7 for "armored cable".		Garages: Portable Lamps, Tools, Charging Cables, etc.	DURACORD, SECURITYFLEX, or All-Rubber Cords, Type S.
<b>12. WIREWAYS</b>	For distribution to motors, lighting, etc.	Rubber-insulated Braid-covered Wire or Cable; Type R. Not more than 30 conductors allowed in one wireway, except where all in excess of 30 are for signalling circuits or are control wires between a motor and its starter. No conductor larger than 500,000 c.m. shall be used.	Hot, Dry Locations (Where fixtures will be heated by lamps)	Chain or Pipe-stem Fixtures	Cotton-braid Cord, Type CF, or Asbestos-insulated Cord, Type AF.
				Pendants	Twisted, Braided Cord, Type CFPD.
<b>13. FIXTURE APPLIANCE AND PORTABLE TOOL WIRING</b>  Dry Locations	Chain-drop fixtures	Flexible Cord; Type FF - Single conductor.	Motion Picture Studios and Projection Rooms	Portable Tools, Lamps, etc.	DURACORD, SECURITYFLEX, or All-rubber Cords, Type S. Heavy-duty Cord Type K or Stage Cable.
	Portable Lamps, Clocks, etc.	Twisted Pair Lamp Cord; Type C, or Parallel Lamp Cord; Type P O.		Pendant Lamps	Reinforced Cord, Type P, or Armored Cord, Type CA.
	Portable Tools, Drop-cord fixtures (Subject to hard usage)	Two-conductor Reinforced Cord; Type P.	Theatres	Border Cables	DURACORD, All-rubber Cords, Type S, Heavy-duty Cords, Type K.
	Portable Lamps, Drop-cord fixtures (Not subject to hard usage)	Two-conductor Cord with Overall Braid; Type PD.		Pendants in Dressing Rooms	Reinf'd Cord, Type P, Arm'd Cable, Type AC, or Arm'd Cord, Type CA.
	Portable Tools, Lamps, Pendants and Stage Applications (Normal conditions)	Two-conductor or Multi-conductor Heavy-duty Cords; Type K.		General Stage Portable Use	DURACORD, All-rubber Cords, Type S, Heavy-duty Cord, Type K.
	Portable Tools, Lamps, Pendants and Stage Applications (Severe Service or where long life is essential)	DURACORD, SECURITYFLEX, or All-rubber Cords; Type S or SJ.	<b>14. LOW-TENSION SIGNALLING CIRCUITS</b>  In residences, low-cost apartments and small stores	Best	Rubber-insulated Braid-covered Wire, Type R, in conduit Armored Cable, Type AC, or Durax Non-metallic Sheathed Cable.
<b>Damp Locations</b>	Pendants (Not subject to hard usage)	Reinforced Cord; Type PWP.		Desirable	Rubber-insulated Telephone Wire; Series 7560.
	Portable Tools, Lamps, Pendants and Stage Applications (Normal conditions)	Heavy-duty Cord; Type K.		Inexpensive	Annunciator or Damp-proof Office Wire; Series 9260 or 9270.
	Portable Tools, Lamps, Pendants and Stage Applications (Severe Service or where long life is essential)	DURACORD, SECURITYFLEX, or All-rubber Cords; Type S or SJ. Brewery Cord and Deck Cable are also designed for these applications.		Long Runs	Rubber-insulated Braid-covered Wire; Type R, or Armored Cable; Type AC.
				Outdoor Runs	Outside Twisted Distributing Drop Rubber-insulated Telephone Wire; Series 7562.
<b>Corrosive Locations</b>	Portable tools, etc. (exposed to vapors, gasoline, etc.)	Always use DURACORD.	In fine residences, apartments, office buildings, industrial plants, institutions, etc.	In Conduit or Under-floor Raceways	Rubber-insulated Braid-covered Wire; Type R.
				Inexpensive Non-fireproof Const.	Armored Cable; Type AC.
				Underground Runs	Rubber-insulated Lead-covered Wire; Type RL, or Parkway Cable.



# ANACONDA WIRING MATERIALS

## for Typical Occupancies

### PURPOSE

The following tabulations indicate the selection of wire and cables to be used under all conditions met in bank buildings and residences. Where a choice of materials is involved, the considerations governing their choice are outlined. Products are identified both by general type and specific Anaconda designation. Wire sizes and number of conductors available for each are also listed. All recommendations conform to the National Electrical Code. Local authorities should also be consulted.

Materials for use in apartment houses, hospitals, and monumental structures, such as cathedrals, auditoria, memorials, etc., are similarly tabulated on pages 6 and 7.

Anaconda Wiring Materials are manufactured in several grades, to meet all conditions encountered in all types of construction.



BANKS					
Utility	Requirements	Kind of Wire or Cable	ANACONDA Designation	Available in Sizes	No. Conductors
SERVICE ENTRANCE	2, 3 or 4 wire underground, in conduit or duct.	Rubber-insulated lead-covered, or varnished cambric lead-covered cable.	RL - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
				#14 to #14/O	2 (Twin)
				#14 to 500,000 C.M.	3
INTERIOR LIGHTING MAINS AND BUILDING POWER FEEDERS	a. Wiring fully protected in conduit.	Rubber-insulated building wire or cable.	R - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
	b. Ditto - wet locations.	Rubber-insulated lead-covered cable.	RL - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
				#14 to #14/O	2
				#14 to 500,000 C.M.	3
	c. Ditto - hot locations.	Slow-burning wire. Asbestos.	SB, AVC.	#14 to 2,000,000 C.M.	1
BRANCH CIRCUITS Light and Power	a. Wiring in conduit, normal conditions.	Rubber-insulated building wire.	R - Better than Code Grade desirable. See page 8.	#14 to 2,000,000 C.M.	1
	b. Ditto - wet locations.	Rubber-insulated lead-covered cable.	RL - Better than Code Grade desirable. See Page 8.	#14 or larger	2 to 3
	c. Ditto - hot locations.	Slow-burning wire. Asbestos.	SB, AVC.	#14 to 2,000,000 C.M.	1
	d. Vault lighting - in conduit.	Rubber-insulated lead-covered cable.	RL - Better than Code Grade desirable. See Page 8.	#14 or larger	1 to 3
LOW VOLTAGE SYSTEMS Feed for Vault; Hold-up Alarm and Vault Alarm	Wiring must be foolproof, and installed in conduit.	Rubber-insulated lead-covered wire or cable.	RL - Better than Code Grade desirable. See Page 8.	#14 or larger	1 to 3
Interior Telephones; Bell or Annunciator Systems and other low-voltage Signalling Systems. Watchman's Patrol System	Wiring in conduit, with minimum break-down risk.	Rubber-insulated building wire.	R.	#14 or larger	1 or 2
OUTSIDE LIGHTS, SIGNS	Water-tight wiring in conduit.	Rubber-insulated lead-covered wire.	RL - Better than Code Grade desirable. See Page 8.	#14 or larger	1 to 3



## RESIDENCES

Utility	Requirements	Kind of Wire or Cable	ANACONDA Designation	Available in Sizes      No. Conductors	
<b>SERVICE ENTRANCE</b>	a. Overhead 2 or 3 wire service; weather-resistant; mechanically strong.	Service drop cables.	C, CF.	#12 to #2	2 or 3
		Service entrance cables.	SC, SCF, SC-100, SCF-100	#12 to #2	2 or 3
		Armored service entrance cables.	ASEC.	#12 to #2	3
	b. 2 or 3 wire service for burial directly in ground.	Underground service entrance cable.	Type T Duraseal if buried for entire length.	All	2 or 3
			Type D Duraseal if part of cable will be run up pole.	All	2 or 3
	c. 2, 3 or 4 wire service installed in conduit or duct underground.	Rubber-insulated lead-covered cable.	RL.	#14 to 2,000,000 C.M.	1
				#14 to #4/0	2
				#14 to 500,000 C.M.	3 or 4
<b>INTERIOR LIGHTING MAINS AND POWER MAINS</b>	a. Inexpensive wiring, "Knob and tube," in non-fireproof buildings.	Rubber-insulated building wire or cable.	R.	#14 to 2,000,000 C.M.	1
	b. Ditto, where metal protection is desired.	Armored cable.	AC - for dry locations.	#14 to #2	1 to 4
		Armored leaded cable.	ACL - in wet locations, or if buried in masonry.	#14 to #4	2 or 3
	c. Ditto, where metal-protected covering is not required.	Non-metallic sheathed cable.	Durax.	#14 to #4	2 or 3 with or without ground wire
	d. For wiring fully protected in conduit.	Rubber-insulated building wire or cable.	R.	#14 to 2,000,000 C.M.	1
			RD.	#14 to #6	2
<b>BRANCH CIRCUITS</b> Light and Power	a. Inexpensive wiring, "Knob and tube," in non-fireproof buildings.	Rubber-insulated building wire or cable.	R.	#14 to 2,000,000 C.M.	1
	b. Ditto, where metal protection is desired.	Armored cable.	AC - for dry locations.	#14 to #2	1 to 4
		Armored leaded cable.	ACL - in wet locations, or if buried in masonry.	#14 to #4	2 or 3
	c. Ditto, where metal protection is not desired, and the "Knob and tube," system is not desired.	Non-metallic sheathed cable.	Durax.	#14 to #4	2 or 3 with or without ground wire
	d. For wiring fully protected in conduit.	Rubber-insulated building wire or cable.	R.	#14 to 2,000,000 C.M.	1
			RD.	#14 to #6	2
<b>OUTDOOR RUNS</b> To Garages, Driveway Lights, etc.	a. Inexpensive overhead wiring - with conduit protection up sides of buildings.	Rubber-insulated building wire or cable.	R.	#14 to 2,000,000 C.M.	1
	b. Ditto - for overhead span only, not inside of conduit.	Weatherproof wire or cable.	URC.	All	Single
	c. For wiring buried directly in ground.	Duraseal cable.	Type T Duraseal	All	Multiple
	d. For wiring in conduit or duct.	Rubber-insulated lead-covered cable.	RL.	#14 to 2,000,000 C.M.	1
				#14 to #4/0	2 (Twin)
				#14 to 500,000 C.M.	3
<b>LOW VOLTAGE SYSTEMS</b> Interior Telephones, Bell Wiring, Signalling Systems, etc.	a. Low-cost wiring; dry locations only; concealed.	Annunciator wire.	Annunciator wire. Series 9260	#14 to #24	1
	b. Ditto - but damp-resistant.	Damp-proof office wire.	Damp-proof office wire. Series 9270	#14 to #20	1 or 2
	c. Long-life service, in conduit or unprotected; also, for exposed wiring.	Rubber-insulated telephone wires.	Rubber-insulated telephone wires. Series 7560-7562	#14 to #22	Twisted pair
	d. Long-life service, non-metallic.	Non-metallic sheathed cable.	Durax.	#14 or larger	2 or 3
	e. Maximum protected wiring, in conduit.	Rubber-insulated building wire.	R.	#14 or larger	1
<b>Antenna System</b>	a. For outside antenna.	Antenna wire.	Antenna wire. Series 1510	#12 to #15	Bare, tinned or enameled
	b. For lead-in, preferably in conduit.	Rubber-insulated building wire.	R.	#14 or larger	1

# ANACONDA WIRING MATERIALS

## for Typical Occupancies

The following tabulations indicate the selection of wire and cables to be used in apartment houses, hospitals and monumental structures.

Materials for use in bank buildings and residences are similarly tabulated on pages 4 and 5.

APARTMENTS					
Utility	Requirements	Kind of Wire or Cable	ANACONDA Designation	Available in	
				Sizes	No. Conductors
SERVICE ENTRANCE	a. Overhead 2 or 3 wire service; weather-resistant.	Service drop cables.	C, CF.	#12 to #2	2 or 3
		Service entrance cables.	SC, SCF, SC-100, SCF-100.	#12 to #2	2 or 3
		Armored service entrance cables.	ASEC.	#12 to #2	3
	b. 2 or 3 wire service for burial directly in ground.	Underground service entrance cable.	Type T Duraseal if buried for entire length.	All	2 or 3
			Type D Duraseal if part of cable will be run up pole.	All	2 or 3
	c. 2, 3 or 4 wire service for installation in conduit or duct underground.	Rubber-insulated lead-covered cable.	RL - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
				#14 to #4/0	2
#14 to 500,000 C.M.				3 or 4	
INTERIOR LIGHTING MAINS AND BUILDING POWER  Elevators, etc.	a. Inexpensive wiring; in non-fireproof buildings; where metal protection is desired.	Armored cable.	AC - in dry locations.	#14 to #2	1 to 4
		Armored leaded cable.	ACL - in wet locations, or if buried in masonry.	#14 to #4	2 or 3
	b. Ditto, where metal protective covering is not required.	Non-metallic sheathed cable.	Durax.	#14 to #4	2 or 3 with or without ground wire
	c. For rigid conduit wiring in fireproof buildings.	Rubber-insulated building wire or cable.	R - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
BRANCH CIRCUITS  Light and Power	a. Inexpensive wiring; in non-fireproof buildings; where metal protection is desired.	Armored cable.	AC - in dry locations.	#14 to #2	1 to 4
		Armored leaded cable.	ACL - in wet locations, or if buried in masonry.	#14 to #4	2 or 3
	b. Ditto, where metal protective covering is not required.	Non-metallic sheathed cable.	Durax.	#14 to #4	2 or 3 with or without ground wire
	c. For rigid conduit wiring in fireproof buildings.	Rubber-insulated building wire or cable.	R - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
	d. For wiring in hot locations - in conduit.	Slow-burning wire, Asbestos.	SB, AVC.	#14 to 2,000,000 C.M.	1
OUTDOOR RUNS  To Garages, Driveway Lights, etc.	a. For wiring buried directly in ground.	Duraseal cable.	Type T Duraseal.	All	Multiple
	b. For wiring in conduit or duct.	Rubber-insulated lead-covered cable.	RL.	#14 to 2,000,000 C.M.	1
				#14 to #4/0	2 (twin)
				#14 to 500,000 C.M.	3
LOW VOLTAGE SYSTEMS  Interior Telephones, Door Opener, Bells, Signalling Systems, etc.	a. Low-cost wiring; dry locations only; concealed.	Annunciator wire.	Annunciator wire. Series 9260.	#14 to #24	1
	b. Ditto - but damp-resistant.	Damp-proof office wire.	Damp-proof office wire. Series 9270.	#14 to #20	1 or 2
	c. Long-life service, in conduit or unprotected; also for exposed wiring.	Rubber-insulated telephone wires.	Rubber-insulated telephone wires. Series 7560-7562.	#14 to #22	Twisted pair
	d. Maximum protected wiring, in conduit.	Rubber-insulated building wire.	R.	#14 or larger	1
Antenna System	a. For antenna.	Antenna wire.	Antenna wire. Series 1510.	#12 to #15	Bare, tinned or enameled
	b. For lead-in, preferably in conduit.	Rubber-insulated building wire.	R.	#14 or larger	1



MONUMENTAL STRUCTURES - CATHEDRALS, AUDITORIUMS, MEMORIALS					
Utility	Requirements	Kind of Wire or Cable	ANACONDA Designation	Available in Sizes	No. Conductors
SERVICE ENTRANCE	a. 2, 3, or 4 wire underground, in conduit or duct.	Rubber-insulated lead-covered cable, or varnished cambric, lead-covered.	RL - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
				#14 to #4/0	2 (Twin)
				#14 to 500,000 C.M.	3
INTERIOR LIGHT AND POWER MAINS		Rubber-insulated lead-covered wire or cable.	RL - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
				#14 to #4/0	2 (Twin)
				#14 to 500,000 C.M.	3
BRANCH CIRCUITS Light and Power	a. For circuits which will operate for many years, in conduit.	Varnished cambric, lead-covered cable.	Varnished Cambric Cable.	All	Multiple
LOW VOLTAGE SYSTEMS Interior Telephones, Signalling Systems, etc.		Note: Lead-covered cable should be thoroughly greased before pulling in, to permit easy removal after many years in conduit.			
Loud Speaker Systems	b. For circuits, wiring of which will be replaced in a relatively few years. (In conduit).	Rubber-insulated building wire or cable.	R - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
OUTDOOR RUNS To Driveway Lights, etc.	a. For wiring buried directly in ground.	Type T Duraseal cable.	Type T Duraseal.	All	Multiple
	b. For wiring in conduit or duct.	Rubber-insulated lead-covered cable.	RL - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
				#14 to #4/0	2 (Twin)
				#14 to 500,000 C.M.	3

## HOSPITALS

Utility	Requirements	Kind of Wire or Cable	ANACONDA Designation	Available in Sizes	No. Conductors
SERVICE ENTRANCE	a. 2, 3, or 4 wire underground, in conduit or duct.	Rubber-insulated lead-covered or varnished cambric, lead-covered cable.	RL - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
				#14 to #4/0	2 (Twin)
				#14 to 500,000 C.M.	3
INTERIOR LIGHTING MAINS AND BUILDING POWER FEEDERS	a. Wiring fully protected in conduit.	Rubber-insulated building wire or cable.	R.	#14 to 2,000,000 C.M.	1
	b. Ditto - hot locations.	Slow-burning wire. Asbestos.	SB, AVC.	#14 to 2,000,000 C.M.	1
	c. Ditto - wet locations.	Rubber-insulated lead-covered cable.	RL - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
				#14 to #4/0	2 (Twin)
				#14 to 500,000 C.M.	3
BRANCH CIRCUITS Light and Power	a. Wiring in conduit, normal conditions.	Rubber-insulated building wire	R - Better than Code Grade desirable. See Page 8.	#14 to 2,000,000 C.M.	1
	b. Ditto - hot locations.	Slow-burning wire. Asbestos.	SB, AVC.	#14 to 2,000,000	1
	c. Ditto - wet locations.	Rubber-insulated lead-covered cable.	RL - Better than Code Grade desirable. See Page 8.	#14 or larger	1 to 3
LOW VOLTAGE SYSTEMS Bell or Annunciator Systems; Interior Telephones	a. Wiring in conduit.	Rubber-insulated building wire.	R.	#14 or larger	1
		Multiple conductor cable.	Series 7560	#19 and larger	Multiple
Nurses Call System; Fire Alarm System	a. Wiring in conduit.	Rubber-insulated building wire.	R.	#14 or larger	1
OUTSIDE LIGHTS, SIGNS	a. Water-tight wiring in conduit.	Rubber-insulated lead-covered cable.	RL - Better than Code Grade desirable. See Page 8.	#14 or larger	1 to 3



# ANACONDA WIRE & CABLE TYPES and SIZES

## TYPES OF INSULATION

The following types of insulation, having flame-retarding finish standards, are for use under normal building conditions.

**Minimum Standard** — National Electrical Code Standard Rubber Insulation; acceptable where only minimum requirements must be met.

**25% Grade or "Intermediate"** (Rubber Insulation) — next higher quality; contains at least 25% new rubber; has longer life, greater resistance to abuse and improved electrical value.

**30% Grade** — at least 30% new rubber; superior to the 25%.

**DURACODE Grade** — special Anaconda specifications, designed to resist deterioration from heat, oxidation or moisture; possesses great durability; for high class construction.

Wire and cables with insulation for special requirements are supplied as follows:

**TYPE ACR** — high-voltage type for lighting and power service; ozone resistant; lasting physical and electrical properties.

**TYPE ANW** — for low-voltage network cables and special industrial uses; highly resistant to moisture, acids and alkalis; low susceptibility to combustion and explosion.

**TYPE AHR** — a heat-resisting long-aging compound for lighting, power, signaling and control cables operating in high temperature locations.

**PERFORMITE** — a high-grade compound for service such as fire alarm, signal and control cables, high insulation resistance, good aging and physical properties.

**Varnished Cambric Cable** — for generator leads, motor leads, bus structures, industrial power and lighting, etc.



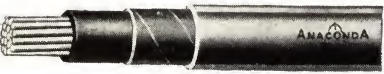
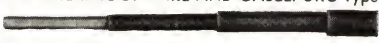








**Asbestos Wire and Cable** — for use under exposure to excessive heat as in fixture wiring, boiler rooms, switchboards, etc.

In addition to the above types of insulation, Anaconda wire and cables are manufactured with insulation meeting Federal Specification Board Specifications JC-101a and JC-106.

## ANACONDA SERVICE

The Anaconda Wire & Cable Company maintains engineering and research laboratories to assist in solving difficult or unusual problems relating to wire and cable. The services of these staffs are available at all times for the solution of technical problems or for the development of special cables.

In addition to the general offices listed below, the Anaconda Wire & Cable Company maintains 22 district sales offices and 11 manufacturing plants, located throughout the country. Addresses of these local offices as well as assistance with special problems may be had by writing to the general offices.

RUBBER INSULATED WIRES and CABLES	SERVICE ENTRANCE CABLES	ARMORED & SHEATHED CABLES
<p><b>RUBBER-INSULATED AND BRAID-COVERED WIRE AND CABLE.</b> Type R—600 volts—Single conductor. Solid or stranded.</p> <p>Code, Intermediate, 30%, Duracode or special grades of rubber compound.</p>  <p>Used for building light and power wiring in dry, protected locations. This includes wiring in conduit, underfloor duct or other raceways, knob and tube wiring; open wiring with porcelain cleats along ceilings or walls; also desirable for long, low-tension or signalling circuits.</p> <p><b>RUBBER-INSULATED AND BRAID-COVERED CABLE.</b> Type RD—600 volts—Duplex conductors. Solid or stranded.</p> <p>Code, Intermediate, 30%, Duracode or special grades of rubber compound.</p>  <p>Used for interior wiring in conduit or other metal raceways, but applications limited to circuits using wire sizes No. 14 to No. 6. Also used for streamers for temporary light and power on construction jobs.</p> <p><b>RUBBER-INSULATED, LEAD-COVERED WIRE AND CABLE.</b> Type RL—600 volts—Single, duplex or three conductor. Solid or stranded.</p> <p>Code, Intermediate, 30%, Duracode or special grades of rubber compound.</p>  <p>For use in moist locations where installed in raceway or otherwise protected from mechanical damage. Particularly useful for wiring in laundries, dye housing, dairies, creameries and in locations liable to be flooded. Also used for underground runs in conduit or other raceway to outlying buildings, yard lights, gasoline pumps, etc.</p>	<p><b>WEATHERPROOF WIRE AND CABLE.</b> URC Type.</p>  <p>For use outdoors—not in conduit—or for open wiring in buildings where corrosive vapors exist.</p> <p><b>NON-METALLIC ARMORED CABLE.</b> Type T Duraseal. Made in any number of conductors and in all sizes. 30% or special grades of rubber compound.</p>  <p>For power lighting or control circuits and for underground service entrance cable. No conduit needed.</p> <p><b>SERVICE DROP CABLES.</b> Types C, CF. Two and three conductors, No. 12 to No. 2 with 30% rubber compound. For services up to 150 volts to ground.</p>  <p>For service run from pole line to house. May also be run in conduit from weatherhead to meter (in some localities conduit is not required).</p> <p><b>SERVICE ENTRANCE CABLE.</b> Types SC, SCF, SC-103, SCF-100. Two and three conductors with 30% rubber compound. For services up to 150 volts to ground.</p>  <p>For service runs from pole to meter. Also for run direct to electric range. No conduit necessary.</p> <p><b>TYPE ASEC</b>—Armored Service Entrance Cable for unprotected locations. For services up to 150 volts to ground.</p> <p><b>UNDERGROUND SERVICE ENTRANCE CABLE.</b> Types T and D Duraseal. Single and multiple conductors in all sizes. For services up to 600 volts to ground.</p>  <p>For service runs from pole, or from transformers vault, underground to house, and into house to meter. Type T is intended to be buried for its entire length. Type D may be run up pole to overhead lines.</p>	<p><b>ARMORED CABLES.</b> Type AC—600 volts. Single, two, three and four conductors—solid or stranded.</p>  <p>For general light and power wiring in non-fireproof homes, industrial plants and other buildings. May be run either concealed or exposed, in dry locations. Very useful for fishing work on remodeling jobs.</p> <p><b>Type ACL</b>—600 volts. Two and three conductors.</p>  <p>For use same as above, except that this cable resists moisture. It may therefore be used for connections to outdoor signs, runs up poles to floodlights and in any damp indoor location.</p> <p><b>DURAX NON-METALLIC SHEATHED CABLE</b> — 600 volts. Made with or without ground wire, in two or three conductors, sizes No. 14 to No. 4.</p>  <p>Widely used for interior concealed or exposed jobs, where moisture is not present and where there is no danger of mechanical injury. This cable may be fished. Particularly adapted to residential jobs.</p> <p><b>ARMORED GROUND WIRE</b>—Series 6040. No. 8 or No. 6 AWG, single conductor, solid.</p>  <p>Used for grounding interior wiring systems, where armor is required to protect the copper conductor from mechanical injury.</p>



**FLEXIBLE CONDUIT**

**FLEXIBLE STEEL CONDUIT.** Inside diameter from 5/16" to 3"



For use in place of rigid conduit and for short runs where bends must be sharp or irregular; also for connections between motors and control devices. If used in damp locations, wires must be lead-sheathed.

**DURADUCT FLEXIBLE NON-METALLIC CONDUIT.** Inside diameter from 7/32" to 2 1/2"



For protection of open wires in knob-and-tube or cleat work. Also used to protect wires which must be fished in a partition or ceiling.

**WIRES and CABLES  
for SPECIAL USES**

**ANTENNA WIRE.** Solid or flexible, bare, tinned or enameled.



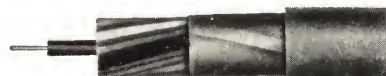
Used for radio receiving or transmitting antennas.

**SLOW BURNING WIRE AND CABLE** Type SB—Single conductor.



For use in switchboards, in wire towers, in hot locations generally. May be installed in conduit if location is permanently dry.

**SIGNAL AND CONTROL CABLE.** Multi-conductors sizes No. 19 to No. 8 AWG. Solid or stranded. 30%, Duracode or special grades of rubber compound. Weatherproof braided, rubber-jacketed or lead-sheathed.



For use in any type of signal or control circuits within or between buildings, in elevators, etc.

**NEON SIGN AND OIL BURNER IGNITION CABLE.** Single conductor.



For use with Neon signs and connections for oil burner ignition systems.

**VARNISHED CAMBRIC CABLE.** Made in single, two, three and four conductors in all sizes. Furnished with weatherproofed or flameproofed braid or lead sheath.



For inside power wiring; high-tension primary lines or low-voltage distribution. For damp locations use lead-sheathed cable only.

**WIRES for LOW-TENSION  
TELEPHONE & SIGNAL SYSTEMS**

**ANNUNCIATOR WIRE.** Single conductor, or twisted pair wire. Cotton covering, saturated with paraffin.



For low-tension circuits, usually run unprotected in walls and ceilings. Not adapted for pulling into conduit or other raceways. Not serviceable in damp locations.

**RUBBER-INSULATED TELEPHONE WIRE.** Outside Twisted. Distributing Drop wire twisted conductors.



Particularly adapted for overhead telephone or other signalling runs between buildings.

**INSIDE WIRE.** Twisted conductors. Furnished with rubber insulation on each conductor and can be obtained in one or more pairs with weather proofed braid or lead sheath.



A most satisfactory wire for interior telephone systems, code calling systems, annunciator or bell systems.

**FIXTURE WIRES**

**RUBBER-COVERED FIXTURE WIRE.** Type RF—300 volts—Single conductor. Solid or stranded.

Code, Intermediate, 30%, Duracode or special grades of rubber compound.



Used on fixtures, where operating temperature is not excessive.

**FLEXIBLE CORD.** Type FF—Single conductor.

Code, Intermediate, 30% or special grades of rubber compound.



For use on chain-drop fixtures, in dry locations.

**FLEXIBLE HEAT RESISTING.** Type CF—Cotton braid. Single conductor Fixture Wire.



For use on fixtures in dry places, operating at not over 300 volts.

Type CFPD—Two or three conductors. Twisted, braid overall.



For pendants not subject to hard usage.

**PORTABLE CORDS  
and LAMP CORDS**

**BRAID OVERALL.** Type PD—Two conductor. Code grade.



For use on portable lamps, clocks, or for drop-lights, will not stand hard usage, or moisture.

**REINFORCED CORD.** Type P—Two conductor. Code grade.

**REINFORCED CORD.** Type PWP—Two conductor. Code grade.



Type P for use on portable tools, drop-cord fixtures, etc., where subject to hard usage in dry locations only. Type PWP for use on pendants not subject to hard usage. May be used in damp places.

**ALL-RUBBER CORDS.** Type S or SJ—Two or three conductor. 30% insulation, 40% jacket.

**ALL-RUBBER CORD.** Type PO-SJ—Two conductors-parallel. Furnished in Black, Green, Brown and Ivory-colored Rubber Jacket.

**SECURITYFLEX CORDS.** Single, two, three and four conductor; heavy duty or light-duty. 60%. Mold-cured.



Type PO-SJ for use on portable lamps, radios, clocks, etc. not subject to hard use. Others for use on all portable electric machines, cord fixtures, etc. subject to hard usage and dampness.

**HEAVY-DUTY CORDS.** Type K—Two conductor and three-conductor. Code grade.



For use on portable tools, lamps, pendants, and general stage use—Border Light Cable. Particularly designed to withstand hard usage and dampness.

**ARMORED LAMP CORD.** Type CA—Two conductors. Code grade.



For pendants in dry places where subject to hard usage, and in some hazardous locations. Also, for pendants in show windows.

**DURACORD WIRE AND CABLE.** Made in single, two, three and four conductors, in all sizes.



For heavy-duty portable cord service where extremely hard service is encountered, in industrial plants, mines, etc. such as connections to dental and medical equipment, tools, machines, stage applications, etc.

**ANACONDA**  
from mine to consumer  
REG. U.S. PAT. OFF.



# DETERMINING WIRE SIZES

## PURPOSE

Sizes of conductors used in all normal electrical circuits in buildings may be determined from data presented on this and the following page, either on the basis of National Electrical Code requirements or on the basis of voltage drop and operating efficiency. In addition, conduit sizes, and the spaces required for conduits in chases or channels are given.

For the selection of wires and cables for any type of service condition in buildings, see pages 2 and 3. For selection of conductors according to service conditions, see pages 2 and 3. For recommended uses of Anaconda wires and cables in different types and occupancies of buildings, see pages 4 to 7. For data on specific Anaconda wiring materials, see pages 8 and 9.

## WIRE SIZES

National Electrical Code requirements as to wire sizes are founded wholly upon safety: that is, minimum sizes are established to keep temperatures within safe limits as a precaution against fire and destruction of insulation.

Since the larger the wire size in relation to the current carried, the less resistance and loss of power, it is normally advantageous to exceed N.E.C. requirements in order to minimize voltage drop and waste of current. An economic balance must be obtained between initial cost and loss of power due to inadequate wire sizes.

## SELECTION BASED ON N.E.C.

If minimum permissible wire sizes are desired, without regard for voltage drop or loss, select conductor sizes from Table I for circuits of any length.

## SELECTION BASED ON VOLTAGE DROP

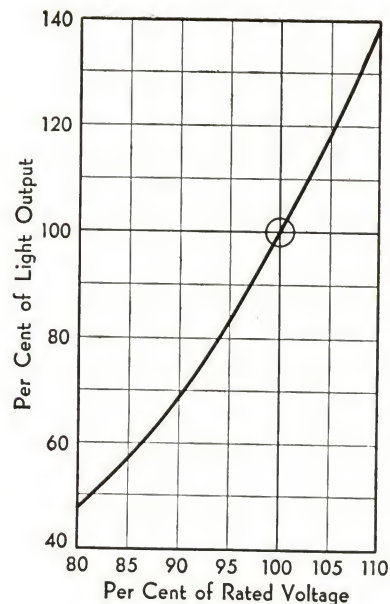
When economic factors, such as operating costs, performance of lighting and power equipment at rated capacities, and reserve capacity for temporary overloads govern design, select wire sizes from Table II according to length of circuit and permissible voltage drop. Use values in this table as follows:

(a) Measure length of circuit from distribution center to point of load along one side of circuit only; i. e., circuit length—not total wire length. In the case of branch circuits serving multiple outlets, measure from distribution center to center of load.

(b) Determine per cent permissible voltage drop for the circuit under consideration. The Industry Committee on Interior Wiring Design, in its handbook (1937) recommends the following voltage drops be considered minimum good practice: feeder currents for lighting, 2%; branch circuits 2%; circuits serving motors, overall from distribution center, 5%.

(c) Express the total allowable drop in volts and multiply the known circuit length by this figure. Example: Voltage supplied 115 v.; permissible drop 1½%; circuit length, as measured 72 ft. Then allowable volts lost equals  $115 \times .015 = 1.725$  v. Circuit length equal to one volt drop is then  $72 \times 1.725 = 124.2$  ft.

(d) In Table II find the smallest wire size (No. 12 or larger) which will carry the known load in amperes the distance thus found. (Note that Table II gives lengths for a 1 volt drop only.) Example, as above except load assumed to be 15 amps.: In column for 15 amps. note that No. 4 wire will serve 130 feet and No. 6 only 82 feet. Specify No. 4 wire or redesign circuit for shorter run or lighter load.



The economic value of adequate wire sizes is best demonstrated by the effect of sub-normal voltages on the performance of lamps. For each drop of 1% in delivered voltage below the rating of a lamp there is a loss of about 3% or more in light emitted. If wire sizes are too small to deliver rated voltage to lamps, motors and appliances, building owners face very unsatisfactory performance of electrical equipment as well as excessive line losses.



I - Wire Sizes Based on Safety Only (N.E.C.)					II - Wire Sizes Based on Performance - Lengths of A-C Circuits Permissible for Drop of One Volt												
Condr. Size		Max. Load in Amp's			Size Awg. or C.M.	Permissible Length of Run in Feet for Drop of One Volt Varying Loads in Amperes as Indicated											
Awg.	Circ. Mils	Rubber Insulation	Varnish-Ed Cambric	Other Insul. or Bare		3 Amp	5	10	15	20	25	30	40	50	60	80	100
14	4,107	15	18	20	14	65	39	19	13								
12	6,530	20	25	30	12	103	62	31	21	15							
10	10,380	25	30	35	10	164	98	49	33	25	20						
8	16,510	35	40	50	8	258	155	78	52	39	31	26					
6	26,250	50	60	70	6	410	246	124	82	62	49	41	31	25			
4	41,740	70	85	90	4	650	390	195	130	98	78	65	49	39	32		
3	52,630	80	95	100	3	815	488	245	163	122	98	81	60	49	41	31	
2	66,370	90	110	125	2	1020	612	306	204	153	122	102	76	61	51	38	
1	83,690	100	120	150	1	1270	762	380	254	191	153	127	95	76	64	48	38
0	105,500	125	150	200	0	1570	940	470	314	236	188	157	118	93	78	59	47
2/0	133,100	150	180	225	2/0	1930	1150	580	385	289	231	193	145	115	96	72	58
3/0	167,800	175	210	275	3/0	2340	1400	700	468	351	281	234	176	140	117	88	70
4/0	211,600	225	270	325	4/0	2800	1680	840	561	422	336	280	210	168	140	105	84
	350,000	300	360	450	*350 M	3770	2270	1130	755	567	453	377	283	227	188	142	113
	500,000	400	480	600	*500 M	4400	2640	1320	882	661	528	440	331	264	220	165	132

ABOVE CURRENTS ARE MAXIMUM allowed by National Electrical Code. For high ambient temperatures or more than one cable in a conduit these values should be reduced: Sizes measured in circular mils are incomplete above 4/0 Awg.

Table applies to single-phase, two-wire, 60 cycle A-C circuits in standard rubber and braid-covered wire and cable - 600 volt class and complies with N.E.C. requirements as to maximum allowable loads.

For other voltage drops, multiply above distances by desired drop. For other currents, multiply the distances in the table by the ratio of the current in the table to the new current. Example: The table shows a permissible circuit length of 561 feet for a 4/0 cable carrying 15 amperes. If it is desired to carry 150 amperes on the circuit the permissible length would be 561 feet times the ratio of 15 amperes to 150 amperes, or 56 feet.

\* 350 M = 350,000 C.M.; 500 M = 500,000 C.M.



**CALCULATING WIRE SIZES**

When it is desired to calculate wire size directly from known length, voltage drop and load in amperes, use the following rule: Multiply length of circuit in feet by load in amperes and this result by 21.5. Divide by allowable drop in volts. The quotient will be wire size in circular mils. Consult Table I for partial list of wire sizes expressed in circular mils and specify Awg. size equal to or larger than the computed size.

**CONDUIT SIZES**

In the "Handbook of Interior Wiring Design," noted above, it is recommended that all circuits subject to possible increases in load or length of run should be installed in conduit or ducts having an ultimate carrying capacity substantially in excess of initial requirements. Alternative is to install feeders with capacity 50% in excess of initial requirements.

Allowable conduit capacities are given in Table III for wire sizes shown.

**CONDUIT SPACING**

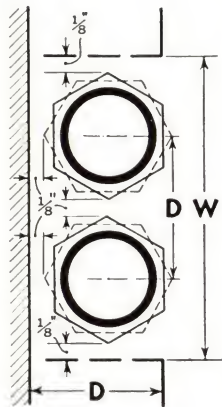
When two or more conduits are installed in chases, channels, pipe shafts or other constricted spaces, clearances must be allowed between conduits for using wrenches and other tools on couplings. These clearances have been computed in Table IV for two conduits with  $\frac{1}{8}$ " minimum spacing. For single conduits dimension D equals dimension W. Clearances for any number of conduits can be found from these data.

**III - Minimum Conduit Sizes - (N.E.C.; Varnished Cambric or Rubber Insulated and Braid Covered Wire)**

Size of Conductor Awg. or C.M.	Number of Conductors in One Conduit								
	1	2	3	4	5	6	7	8	9
	Minimum Size of Conduit in Inches								
14	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	1	1
12	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	1	1	1	$1\frac{1}{4}$
10	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	1	1	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$
8	$\frac{1}{2}$	$\frac{3}{4}$	1	1	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{2}$
6	$\frac{1}{2}$	1	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	2	2	2
4	$\frac{3}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{2}$	2	2	2	2	$2\frac{1}{2}$
3	$\frac{3}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{2}$	2	2	2	$2\frac{1}{2}$	$2\frac{1}{2}$
2	$\frac{3}{4}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	2	2	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$
1	$\frac{3}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	2	2	$2\frac{1}{2}$	$2\frac{1}{2}$	3	3
0	1	$1\frac{1}{2}$	2	2	$2\frac{1}{2}$	$2\frac{1}{2}$	3	3	3
2/0	1	2	2	$2\frac{1}{2}$	$2\frac{1}{2}$	3	3	3	$3\frac{1}{2}$
3/0	1	2	2	$2\frac{1}{2}$	3	3	3	$3\frac{1}{2}$	$3\frac{1}{2}$
4/0	$1\frac{1}{4}$	2	$2\frac{1}{2}$	$2\frac{1}{2}$	3	3	$3\frac{1}{2}$	$3\frac{1}{2}$	4
350,000	$1\frac{1}{4}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$3\frac{1}{2}$	4			
500,000	$1\frac{1}{2}$	3	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$			

**IV - Space Requirements for Conduits - Dimensions in Inches**

Conduit Sizes	$\frac{1}{2}$ "		$\frac{3}{4}$ "		1"		$1\frac{1}{4}$ "		$1\frac{1}{2}$ "		2"		$2\frac{1}{2}$ "		3"		$3\frac{1}{2}$ "	
	D	W	D	W	D	W	D	W	D	W	D	W	D	W	D	W	D	W
$\frac{1}{2}$ "	$1\frac{1}{4}$	$2\frac{5}{8}$	$1\frac{3}{8}$	$2\frac{7}{8}$	$1\frac{1}{2}$	$3\frac{1}{8}$	$1\frac{11}{16}$	$3\frac{1}{2}$	$1\frac{13}{16}$	$3\frac{3}{4}$	$2\frac{1}{8}$	$4\frac{3}{8}$	$2\frac{7}{16}$	5	$2\frac{3}{4}$	$5\frac{3}{8}$	$3\frac{3}{8}$	$6\frac{3}{8}$
$\frac{3}{4}$ "	$1\frac{3}{8}$	$2\frac{7}{8}$	$1\frac{1}{2}$	$3\frac{1}{8}$	$1\frac{5}{8}$	$3\frac{3}{8}$	$1\frac{13}{16}$	$3\frac{3}{4}$	$1\frac{15}{16}$	4	$2\frac{1}{4}$	$4\frac{3}{8}$	$2\frac{9}{16}$	$5\frac{1}{4}$	3	$6\frac{1}{8}$	$3\frac{1}{4}$	$6\frac{5}{8}$
1"	$1\frac{1}{2}$	$3\frac{3}{8}$	$1\frac{5}{8}$	$3\frac{3}{8}$	$1\frac{3}{4}$	$3\frac{5}{8}$	$1\frac{15}{16}$	4	$2\frac{1}{16}$	$4\frac{3}{8}$	$2\frac{3}{8}$	$4\frac{7}{8}$	$2\frac{11}{16}$	$5\frac{1}{2}$	3	$6\frac{3}{8}$	$3\frac{3}{8}$	$6\frac{7}{8}$
$1\frac{1}{4}$ "	$1\frac{11}{16}$	$3\frac{1}{2}$	$1\frac{13}{16}$	$3\frac{3}{4}$	$1\frac{15}{16}$	4	$2\frac{1}{8}$	$4\frac{3}{8}$	$2\frac{1}{4}$	$4\frac{3}{8}$	$2\frac{3}{8}$	$5\frac{1}{4}$	$2\frac{7}{8}$	$5\frac{3}{8}$	$3\frac{1}{4}$	$6\frac{3}{8}$	$3\frac{11}{16}$	$7\frac{1}{4}$
$1\frac{1}{2}$ "	$1\frac{13}{16}$	$3\frac{3}{4}$	$1\frac{15}{16}$	4	$2\frac{1}{16}$	$4\frac{1}{4}$	$2\frac{1}{4}$	$4\frac{3}{8}$	$2\frac{3}{8}$	$4\frac{7}{8}$	$2\frac{11}{16}$	$5\frac{1}{2}$	3	$6\frac{3}{8}$	$3\frac{3}{8}$	$6\frac{7}{8}$	$3\frac{11}{16}$	$7\frac{1}{2}$
2"	$2\frac{1}{8}$	$4\frac{3}{8}$	$2\frac{1}{4}$	$4\frac{5}{8}$	$2\frac{3}{8}$	$4\frac{7}{8}$	$2\frac{3}{8}$	$4\frac{7}{8}$	$2\frac{11}{16}$	$5\frac{1}{2}$	3	$6\frac{3}{8}$	$3\frac{5}{8}$	$6\frac{3}{4}$	$3\frac{3}{8}$	$7\frac{3}{8}$	4	$8\frac{3}{8}$
$2\frac{1}{2}$ "	$2\frac{7}{16}$	5	$2\frac{9}{16}$	$5\frac{1}{4}$	$2\frac{11}{16}$	$5\frac{1}{2}$	$2\frac{7}{8}$	$5\frac{3}{8}$	3	$6\frac{3}{8}$	$3\frac{5}{8}$	$6\frac{3}{4}$	$3\frac{5}{8}$	$7\frac{3}{8}$	$3\frac{11}{16}$	8	$4\frac{5}{16}$	$8\frac{3}{4}$
3"	$2\frac{3}{4}$	$5\frac{5}{8}$	3	$6\frac{1}{8}$	3	$6\frac{1}{8}$	$3\frac{1}{4}$	$6\frac{5}{8}$	$3\frac{3}{8}$	$6\frac{7}{8}$	$3\frac{5}{8}$	$7\frac{3}{8}$	$3\frac{11}{16}$	8	$4\frac{7}{16}$	9	$4\frac{3}{4}$	$9\frac{5}{8}$
$3\frac{1}{2}$ "	$3\frac{3}{8}$	$6\frac{3}{8}$	$3\frac{1}{4}$	$6\frac{5}{8}$	$3\frac{3}{8}$	$6\frac{7}{8}$	$3\frac{11}{16}$	$7\frac{1}{4}$	$3\frac{13}{16}$	$7\frac{1}{2}$	4	$8\frac{1}{8}$	$4\frac{5}{8}$	$8\frac{3}{4}$	$4\frac{3}{4}$	$9\frac{5}{8}$	5	$10\frac{3}{8}$



Write for More Detailed Information on Products of Particular Interest

**ANACONDA WIRE & CABLE COMPANY**

General Offices: 25 Broadway, New York

20 North Wacker Drive, Chicago





## WIRE & CABLE COMPANY

### ENGINEERING SERVICES

At various district sales offices and at our engineering and research laboratories at Hastings-on-Hudson a staff of engineers is maintained who are qualified to give immediate assistance to specification writers having difficult or unusual problems in the design or application of wire and cable. The services of this engineering and research staff are available at all times for assistance in the solution of technical wire problems or for the development of special cables.

#### *General Sales Offices*

25 BROADWAY, NEW YORK

#### *Chicago Sales Office*

20 NORTH WACKER DRIVE

#### DISTRICT SALES OFFICES AT

ATLANTA, GA. . . . .	66 Luckie Street	MILWAUKEE, WIS. . . . .	208 East Wisconsin Ave.
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CLEVELAND, OHIO . . . . .	Builders Exchange Bldg.	PHILADELPHIA, PA. . . . .	Architects Building
DALLAS, TEXAS . . . . .	Interurban Building	PITTSBURGH, PA. . . . .	Oliver Building
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LOS ANGELES, CAL. . . . .	430 Colyton Street	WASHINGTON, D. C. . . . .	Investment Building

#### MANUFACTURING PLANTS AT

ANDERSON, IND. :	ANSONIA, CONN. :	GREAT FALLS, MONT. :	HASTINGS-ON-HUDSON, N. Y.
KENOSHA, WIS. :	MARION, IND. :	MUSKEGON, MICH. :	OAKLAND, CAL. :
	PAWTUCKET, R. I. :	SYCAMORE, ILL.	ORANGE, CAL.